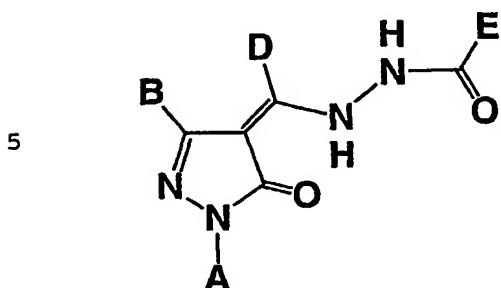


CLAIMS

1. A pyrazolone compound represented by the formula (1)

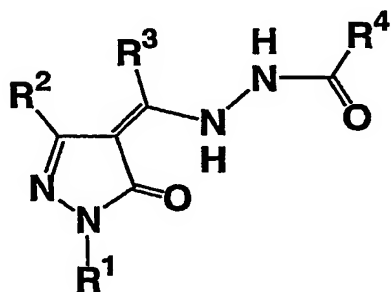


Formula (1)

wherein A is a C₂₋₁₄ aryl group (the C₂₋₁₄ aryl group may be optionally substituted with one or more C₁₋₆ alkyl groups, one or more C₁₋₃ alkyl groups substituted with one or more fluorine atoms, one or more halogen atoms, one or more nitro groups, one or more C₁₋₆ alkylcarbonyl groups, one or more hydroxyl groups or one or more amino groups (the hydroxyl group and the amino group may be substituted with a C₁₋₆ alkyl group or a C₁₋₆ alkylcarbonyl group)), B is a hydrogen atom, a C₁₋₆ alkyl group, a C₁₋₃ alkyl group substituted with one or more fluorine atoms or a C₂₋₁₄ aryl group, D is a hydrogen atom, a C₁₋₆ alkyl group, a C₁₋₃ alkyl group substituted with one or more fluorine atoms or a C₂₋₁₄ aryl group, and E is a C₂₋₁₄ aryl group (the C₂₋₁₄ aryl group is optionally substituted with one or more hydroxyl groups, one or more nitro groups, one or more halogen atoms, one or more cyano groups, one or more C₁₋₃ alkyl groups substituted with one or more fluorine atoms, NG¹G² (wherein G¹ and G² are independently hydrogen atoms, formyl groups, C₁₋₆ alkyl groups or C₁₋₆

alkylcarbonyl groups), one or more carboxyl groups, one or more sulfonic acid groups, one or more phosphonic acid groups, one or more carbamido groups (the carbamido group may be substituted with a C₁₋₆ alkyl group), one or more
5 sulfamido groups (the sulfamido group may be substituted with a C₁₋₆ alkyl group), one or more hydroxycarbamido groups, one or more hydroxysulfamido groups, one or more tetrazole groups, one or more C₁₋₆ alkoxy carbonyl groups or X(CYZ)_nCO₂H (wherein X is CH₂, O, S or NG³ (G³ is a
10 hydrogen atom, a C₁₋₆ alkyl group, a formyl group or a C₁₋₆ alkylcarbonyl group), Y and Z are independently hydrogen atoms or C₁₋₃ alkyl groups, and n is 0, 1, 2 or 3)), a tautomer, prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

15 2. A pyrazolone compound represented by the formula (2)



Formula (2)

20 wherein R¹ is a C₂₋₁₄ aryl group (the C₂₋₁₄ aryl group may be optionally substituted with one or more C₁₋₆ alkyl groups, one or more C₁₋₃ alkyl groups substituted with one or more fluorine atoms, one or more halogen atoms, one or
25 more nitro groups, one or more C₁₋₆ alkylcarbonyl groups, one or more hydroxyl groups or one or more amino groups

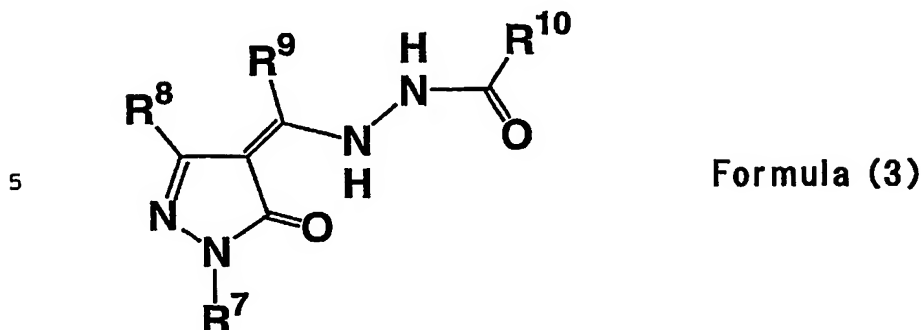
(the hydroxyl group and the amino group may be substituted with a C₁₋₆ alkyl group or a C₁₋₆ alkylcarbonyl group)), R² is a hydrogen atom, a C₁₋₆ alkyl group, a C₁₋₃ alkyl group substituted with one or more fluorine atoms or a C₂₋₁₄ aryl group, R³ is a hydrogen atom, a C₁₋₆ alkyl group, a C₁₋₃ alkyl group substituted with one or more fluorine atoms or a C₂₋₁₄ aryl group, and R⁴ is a C₂₋₁₄ aryl group (the C₂₋₁₄ aryl group is optionally substituted with one or more hydroxyl groups, one or more nitro groups or NR⁵R⁶ (wherein R⁵ and R⁶ are independently hydrogen atoms, formyl groups, C₁₋₆ alkyl groups or C₁₋₆ alkylcarbonyl groups)), a tautomer prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

3. The pyrazolone compound according to Claim 2, wherein R⁴ is a C₂₋₁₄ aryl group substituted with one or more hydroxyl groups, a tautomer, prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

4. The pyrazolone compound according to Claim 2, wherein R⁴ is a C₂₋₁₄ aryl group substituted with NR⁵R⁶ (wherein R⁵ and R⁶ are independently hydrogen atoms, formyl groups, C₁₋₆ alkyl groups or C₁₋₆ alkylcarbonyl groups), a tautomer, prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

5. The pyrazolone compound according to Claim 2, wherein R⁴ is a C₂₋₁₄ aryl group substituted with one or more nitro groups, a tautomer, prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

6. A pyrazolone compound represented by the formula (3)



wherein R^7 is a C_{2-14} aryl group (the C_{2-14} aryl group may
10 be optionally substituted with one or more C_{1-6} alkyl
groups, one or more C_{1-3} alkyl groups substituted with one
or more fluorine atoms, one or more halogen atoms, one or
more nitro groups, one or more C_{1-6} alkylcarbonyl groups,
one or more hydroxyl groups or one or more amino groups
15 (the hydroxyl group and the amino group may be
substituted with a C_{1-6} alkyl group or a C_{1-6} alkylcarbonyl
group)), R^8 is a hydrogen atom, a C_{1-6} alkyl group, a C_{1-3}
alkyl group substituted with one or more fluorine atoms
or a C_{2-14} aryl group, R^9 is a hydrogen atom, a C_{1-6} alkyl
20 group, a C_{1-3} alkyl group substituted with one or more
fluorine atoms or a C_{2-14} aryl group, and R^{10} is a C_{2-14}
aryl group (the C_{2-14} aryl group is optionally substituted
with one or more carboxyl groups, one or more sulfonic
acid groups, one or more phosphonic acid groups, one or
25 more carbamido groups, one or more sulfamido groups, one
or more hydroxycarbamido groups, one or more
hydroxysulfamido groups, one or more tetrazole groups,

one or more C₁₋₆ alkoxy carbonyl groups or X(CYZ)_nCO₂H
(wherein X is CH₂, O, S or NR¹¹ (R¹¹ is a hydrogen atom, a
C₁₋₆ alkyl group, a formyl group or a C₁₋₆ alkyl carbonyl
group), Y and Z are independently hydrogen atoms or C₁₋₃
5 alkyl groups, and n is 0, 1, 2 or 3)), a tautomer,
prodrug or pharmaceutically acceptable salt of the
compound or a solvate thereof.

7. The pyrazolone compound according to Claim 6, wherein
R¹⁰ is a C₂₋₁₄ aryl group substituted with one or more
10 carboxyl groups, a tautomer, prodrug or pharmaceutically
acceptable salt of the compound, or a solvate thereof.

8. The pyrazolone compound according to Claim 6, wherein
R¹⁰ is a C₂₋₁₄ aryl group substituted with X(CYZ)_nCO₂H
(wherein X is CH₂, O, S or NR¹¹ (R¹¹ is a hydrogen atom, a
15 C₁₋₆ alkyl group, a formyl group or a C₁₋₆ alkyl carbonyl
group), Y and Z are independently hydrogen atoms or C₁₋₃
alkyl groups, and n is 0, 1, 2 or 3), a tautomer, prodrug
or pharmaceutically acceptable salt of the compound or a
solvate thereof.

20 9. The pyrazolone compound according to Claim 6, wherein
R¹⁰ is a C₂₋₁₄ aryl group substituted with one or more
sulfonic acid groups, a tautomer, prodrug or
pharmaceutically acceptable salt of the compound or a
solvate thereof.

25 10. The pyrazolone compound according to Claim 6, wherein
R¹⁰ is a C₂₋₁₄ aryl group substituted with one or more
phosphonic acid groups, a tautomer, prodrug or

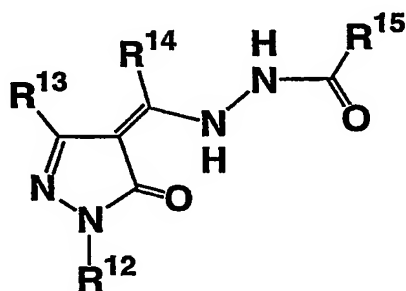
pharmaceutically acceptable salt of the compound or a solvate thereof.

11. The pyrazolone compound according to Claim 6, wherein R^{10} is a C_{2-14} aryl group substituted with one or more tetrazole groups, a tautomer, prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

12. The pyrazolone compound according to Claim 6, wherein R^{10} is a C_{2-14} aryl group substituted with one or more carbamido groups, a tautomer, prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

13. The pyrazolone compound according to Claim 6, wherein R^{10} is a C_{2-14} aryl group substituted with one or more sulfamido groups, a tautomer, prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

14. A pyrazolone compound represented by the formula (4)



Formula (4)

wherein R^{12} is a C_{2-14} aryl group (the C_{2-14} aryl group may be optionally substituted with one or more C_{1-6} alkyl groups, one or more C_{1-3} alkyl groups substituted with one or more fluorine atoms, one or more halogen atoms, one or more nitro groups, one or more C_{1-6} alkylcarbonyl groups, one or more hydroxyl groups or one or more amino groups

(the hydroxyl group and the amino group may be substituted with a C₁₋₆ alkyl group or a C₁₋₆ alkylcarbonyl group)), R¹³ is a hydrogen atom, a C₁₋₆ alkyl group, a C₁₋₃ alkyl group substituted with one or more fluorine atoms or a C₂₋₁₄ aryl group, R¹⁴ is a hydrogen atom, a C₁₋₆ alkyl group, a C₁₋₃ alkyl group substituted with one or more fluorine atoms or a C₂₋₁₄ aryl group, and R¹⁵ is a C₂₋₁₄ aryl group (the C₂₋₁₄ aryl group is substituted with a substituent selected from a hydroxyl group, an amino group, a nitro group, a halogen atom, a cyano group, a C₁₋₃ alkyl group substituted with one or more fluorine atoms, a carbamido group and a sulfamido group (the carbamido group and the sulfamido group may be substituted with a C₁₋₆ alkyl group) and with a substituent selected from a carboxyl group, a sulfonic acid group, a phosphonic acid group, a carbamido group, a sulfamido group, a hydroxycarbamido group, a hydroxysulfamido group, a tetrazole group, a C₁₋₆ alkoxy carbonyl group and X(CYZ)_nCO₂H (wherein X is CH₂, O, S or NR¹⁶ (R¹⁶ is a hydrogen atom, a C₁₋₆ alkyl group, a formyl group or a C₁₋₆ alkylcarbonyl group), Y and Z are independently hydrogen atoms or C₁₋₃ alkyl groups, and n is 0, 1, 2 or 3)), a tautomer, prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

15. The pyrazolone compound according to Claim 14, wherein R¹⁵ is a C₂₋₁₄ aryl group substituted with a

hydroxyl group and a carboxyl group, a tautomer, prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

16. The pyrazolone compound according to Claim 14,
5 wherein R¹⁵ is a C₂₋₁₄ aryl group substituted with an amino group and a carboxyl group, a tautomer, a prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

17. The pyrazolone compound according to Claim 14,
10 wherein R¹⁵ is a C₂₋₁₄ aryl group substituted with a substituent selected from a nitro group, a halogen atom, a cyano group, a C₁₋₃ alkyl group substituted with one or more fluorine atoms, a carbamido group and a sulfamido group (the carbamido group and the sulfamido group may be
15 substituted with a C₁₋₆ alkyl group) and with a carboxyl group, a tautomer, prodrug or pharmaceutically acceptable salt of the compound or a solvate thereof.

18. The thrombopoietin receptor activator according to Claim 1.

20 19. The thrombopoietin receptor activator according to Claim 2.

20. The thrombopoietin receptor activator according to Claim 3.

21. The thrombopoietin receptor activator according to
25 Claim 4.

22. The thrombopoietin receptor activator according to Claim 5.

23. The thrombopoietin receptor activator according to Claim 6.
24. The thrombopoietin receptor activator according to Claim 7.
- 5 25. The thrombopoietin receptor activator according to Claim 8.
26. The thrombopoietin receptor activator according to Claim 9.
27. The thrombopoietin receptor activator according to
10 Claim 10.
28. The thrombopoietin receptor activator according to Claim 11.
29. The thrombopoietin receptor activator according to Claim 12.
- 15 30. The thrombopoietin receptor activator according to Claim 13.
31. The thrombopoietin receptor activator according to Claim 14.
32. The thrombopoietin receptor activator according to
20 Claim 15.
33. The thrombopoietin receptor activator according to Claim 16.
34. The thrombopoietin receptor activator according to Claim 17.
- 25 35. A preventive, therapeutic or improving agent for diseases against which activation of the thrombopoietin receptor is effective, which contains the thrombopoietin

receptor activator according to Claim 18, Claim 19, Claim 20, Claim 21, Claim 22, Claim 23, Claim 24, Claim 25, Claim 26, Claim 27, Claim 28, Claim 29, Claim 30, Claim 31, Claim 32, Claim 33 or Claim 34, a tautomer, prodrug
5 or pharmaceutically acceptable salt of the activator or a solvate thereof, as an active ingredient.

36. A platelet increasing agent containing the thrombopoietin receptor activator according to Claim 18, Claim 19, Claim 20, Claim 21, Claim 22, Claim 23, Claim
10 24, Claim 25, Claim 26, Claim 27, Claim 28, Claim 29, Claim 30, Claim 31, Claim 32, Claim 33 or Claim 34, a tautomer, prodrug or pharmaceutically acceptable salt of the activator or a solvate thereof, as an active ingredient.

15 37. Medicament comprising at least one compound of formula (1) according to one or more of Claim 1 to 17.